

# **Agricultural Output Price Index**

#### **Year 2023**

**Tirana, 03 July 2024:** In 2023, the annual agricultural output price index reached 142.8 from 125.1 in 2022, showing an increase by 14.1 % compared to the previous year. During this year the output price index of crop products increased by 9.85 %, while the output price index of animal products increased by 18.9 %, compared to the last year.

170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
Total Output Agricultural

— Crop Output

Animal Output

Fig. 1 Quarterly Output Price Indices in Agricultural products, (2015=100)

Source: Monthly Survey of Agriculture Products Prices, INSTAT

Tab. 1 Annual Output price Index in Agricultural products, (2015=100)

		Weight 2015			2022	2023		
Code	Products	in %	Base Year	Index	Annual change in %	Index	Annual change in %	
	Total Output Agriculture	100	100	125.1	11.1%	142.8	14.1%	
I	Crop Output	56	100	118.1	2.9%	127.7	9.9%	
1	Cereals	4.2	100	132.7	37.3%	109.1	-17.8%	
2	Industrial crops	0.4	100	163.4	16.7%	188.3	15.2%	
3	Forage plants	3.8	100	117.0	18.0%	109.5	-6.4%	
4	Vegetables	23.2	100	116.3	-0.7%	128.5	10.5%	
5	Potatoes	3.1	100	147.2	16.3%	174.8	18.8%	
6	Permanent crops	17.2	100	110.1	-4.2%	130.0	20.8%	
6.1	Fruits	8.2	100	128.3	-3.3%	141.5	10.2%	
6.2	Citrus fruit	1	100	88.6	-1.1%	112.2	26.7%	
6.3	Grapes	5.5	100	100.0	-2.2%	136.8	36.2%	
6.4	Olives	2.5	100	81.3	-14.4%	100.6	23.8%	
7	Wine	2.6	100	132.6	0.5%	136.8	3.2%	
8	Olive oil	1.5	100	98.7	-5.9%	106.0	7.5%	
II	Animal Output	44	100	134.0	22.1%	159.3	18.9%	
9	Animal production	18.6	100	127.9	15.9%	146.5	14.5%	
9.1	Cattle	8.3	100	121.1	15.1%	137.8	13.7%	
9.2	Pigs	3.1	100	131.1	12.2%	141.7	8.1%	
9.3	Sheep & goats	5.1	100	140.8	21.7%	161.3	14.6%	
9.4	Poultry	2.1	100	119.3	10.2%	152.8	28.1%	
10	Milk	19.7	100	143.5	28.9%	178.9	24.6%	
10.1	Cow milk	14.8	100	145.3	30.1%	172.8	18.9%	
10.2	Other milk	4.9	100	138.2	25.4%	197.7	43.0%	
11	Other animal products	5.7	100	120.7	18.0%	132.9	10.1%	
11.1	Eggs	2.8	100	131.5	25.8%	137.1	4.3%	
11.1	Honey	2.9	100	110.8	10.6%	129.6	7.0%	

Source: Monthly Survey of Agriculture Products Prices, INSTAT

Tab. 2 Quarterly Output price Index in Agricultural products 2022 (2015=100)

Code	Products	Weight in %	Quarter I 2023		Qı	Quarter II 2023		Quarter III 2023		Quarter IV 2023	
			Index	Annual change in %	Index	Annual change in %	Index	Annual change in %	Index	Annual change in %	
	Total Output Agriculture	100	142.6	15.1%	150.6	16.0%	135.1	12.9%	144.2	13.4%	
I	Crop Output	56	132.6	2.1%	141.6	7.8%	119.1	11.7%	129.9	17.8%	
1	Cereals	4.2	129.7	4.0%	121.1	-15.4%	96.1	-29.2%	93.2	-27.3%	
2	Industrial crops	0.4	196.8	25.7%	180.3	11.6%	176.1	8.0%	196.7	14.7%	
3	Forage plants	3.8	111.2	-8.3%	112.2	-14.1%	104.7	-7.1%	111.2	1.0%	
4	Vegetables	23.2	136.9	4.4%	141.9	14.2%	110.7	12.0%	126.7	12.9%	
5	Potatoes	3.1	161.0	-0.2%	176.8	13.8%	177.4	32.4%	181.5	35.2%	
6	Permanent crops	17.2	125.4	-1.0%	143.0	2.6%	125.0	25.4%	138.3	38.3%	
6.1	Fruits	8.2	141.0	-1.1%	147.2	3.6%	135.3	24.2%	139.9	14.5%	
6.2	Citrus fruit	1	93.7	5.9%	0.0	-	0.0	-	121.8	37.5%	
6.3	Grapes	5.5	0.0	-	0.0	-	120.0	28.3%	174.6	51.6%	
6.4	Olives	2.5	108.8	-7.5%	100.3	-10.3%	99.7	-4.2%	99.6	47.9%	
7	Wine	2.6	128.4	2.7%	136.9	2.3%	145.2	6.3%	130.5	0.2%	
8	Olive oil	1.5	101.9	1.8%	101.5	1.9%	102.2	1.2%	113.4	18.5%	
II	Animal Output	44	152.2	28.8%	161.8	26.6%	159.0	14.2%	163.0	9.1%	
9	Animal production	18.6	140.2	20.5%	144.9	15.7%	146.7	13.9%	153.1	9.9%	
9.1	Cattle	8.3	134.4	22.3%	136.7	15.7%	138.8	11.9%	141.1	6.8%	
9.2	Pigs	3.1	138.8	14.3%	142.2	8.4%	142.5	7.8%	143.3	2.6%	
9.3	Sheep & goats	5.1	155.2	20.9%	159.9	16.7%	162.4	15.6%	165.1	9.3%	
9.4	Poultry	2.1	139.2	22.7%	144.2	24.8%	146.5	27.4%	181.1	36.1%	
10	Milk	19.7	174.1	41.3%	181.7	37.7%	176.0	16.2%	183.0	9.2%	
10.1	Cow milk	14.8	170.5	38.8%	174.6	32.8%	170.7	10.1%	174.9	1.6%	
10.2	Other milk	4.9	188.7	51.1%	200.1	50.1%	190.9	35.2%	210.2	38.1%	
11	Other animal products	5.7	131.3	18.9%	131.1	11.2%	130.6	5.9%	138.6	5.7%	
11.1	Eggs	2.8	139.1	19.6%	130.0	1.6%	130.2	-3.7%	148.9	1.6%	
11.1	Honey	2.9	124.4	18.5%	132.9	22.0%	131.6	16.9%	129.4	11.0%	

( - ) Seasonal products Source: Monthly Survey of Agriculture Products Prices, INSTAT

## Methodology

Price indices in agriculture are calculated based on the standards and guidelines outlined in the Handbook for EU agricultural price statistics. Agricultural output prices are collected through a Monthly Survey in the entire territory of the Republic of Albania. The information is gained from farms, slaughter-houses and weekly markets as well as on other places where agricultural products are sold. For domestic products the prices are collected at farm-gate level excluding taxes. They are surveyed in Albanian Lek, while the measuring units are in kg, litre or pieces.

Output price index in agricultural products is divided into two main groups: Crop and animal products. For crop products prices are collected for the following groups: cereals, industrial crops, forage plants, vegetables, potatoes and permanent crops. For animal products prices are collected for animals and animal products. Within this framework prices are surveyed for four main categories of animals: Cattle, pigs, sheep and goats as well as poultry based on the live weight of animals for slaughter. Within animal products, prices are collected for the categories: milk, eggs and honey.

#### Weighting scheme of Output price Index in Agricultural products

To calculate the Output price Index in Agricultural products a weighting scheme is used. The weighting factor attached to each elementary index and aggregate index corresponds to the sales value of the respective product (excluding VAT) during the base period (2015=100) according to Eurostat methodology. Weights are also used to join indices of main groups and aggregate indices. The weighting scheme used complies with the methodology of the Economic Accounts for Agriculture. The total and quarterly weights are fixed over a base period. The weighting scheme of the producer price index for agricultural products changes every 5 years.

#### Calculation of elementary price index

The elementary index is calculated according to the following formula using absolute average prices.

$$R_{i}^{t} = \frac{\frac{1}{n} \sum P_{ij}^{t}}{\frac{1}{n} \sum P_{ij}^{0}}.100$$

 $R_i^t$ : Elementary price index for month "t" and production "i"

P: Collected prices

i: Production "i"

j: The registered production price (generally the price for district 1.2. .... n)

t: Month observed

o: Base month

### Calculation of aggregate price index

The aggregate index for product groups, subgroups and the total output of agricultural products is calculated using the following formula:

$$I^{t=} \sum (R_i^t \cdot \frac{w_i^o}{\sum w_i^o}) \cdot 100$$

- I: Aggregate index for period "t"
- w<sub>i</sub>°: Weighting factor in base period for production "i"
- i: Production "i"
- t: Month observed
- o: Base month